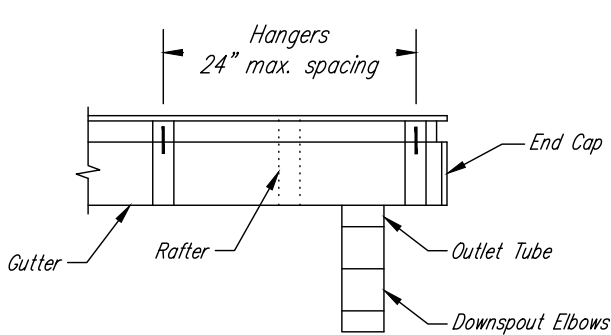
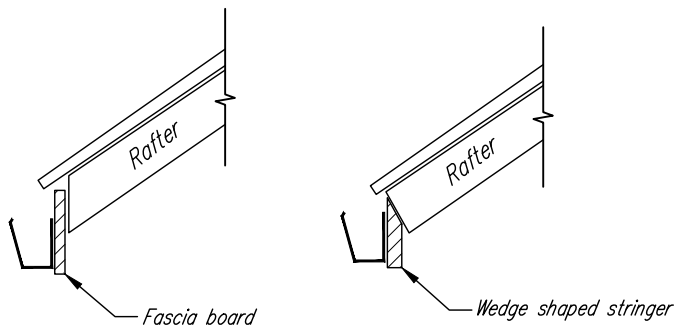


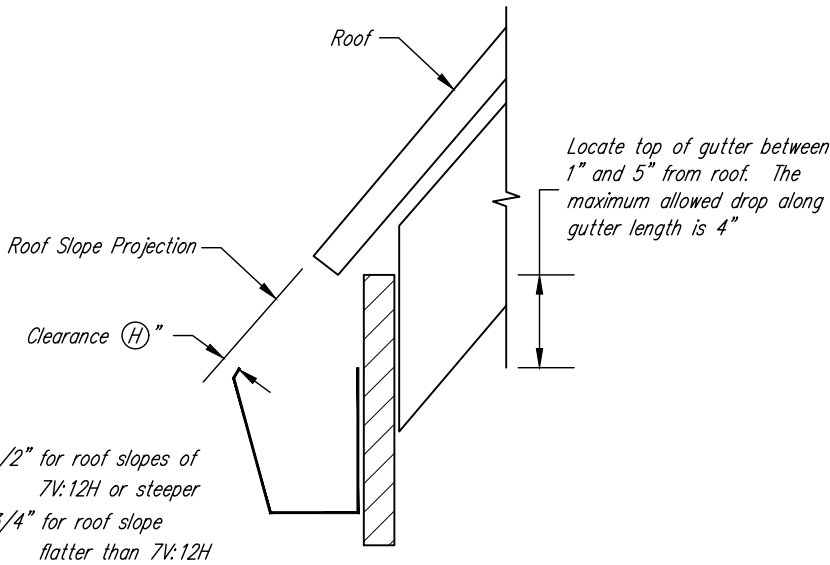
GUTTER AND DOWNSPOUT DETAIL



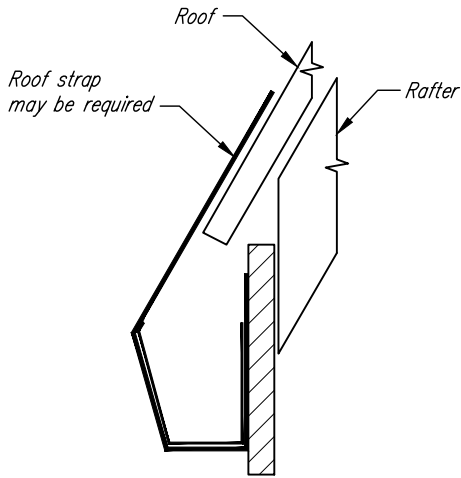
FRONT VIEW



FASCIA AND STRINGER DETAIL



CLEARANCE DETAIL



WRAP-AROUND STRAP

(Only needed when clearance of roof projection can not be met)

NOTES

1. Gutter must be corrosion resistant material of sufficient thickness to prevent flexing between supports. Aluminum gutters must have a nominal thickness of 0.032 inches. Aluminum downspouts will have a nominal thickness of 0.020 inches. Galvanized steel gutters will have a minimum thickness of 28 gauge. All gutters must have end caps.
2. Dissimilar metals must not be in contact with each other.
3. Gutters must have continuous backing support with a vertical face. A wedge shaped stringer may be used for support. Rafter ends and fascia boards must be sound. Fascia board material to be spruce, pine, fir or better. Cover non-pressure treated boards with aluminum flashing or exterior paint prior to installation of roof gutter.
4. Locate gutter hangers a maximum of 24 inches apart and attach to fascia board or roof sheathing at rafter locations.
5. Securely fasten downspouts at the top and bottom with support brackets and place intermediate supports at a maximum spacing of 10 feet where not housed within a protective sleeve.
6. Make all gutter joints watertight with mastic or caulking.
7. Use expansion joints on straight runs of 40 feet or more and where the gutter system is not free floating. If gutters are seamless follow the manufacturer's recommendations.
8. Place gutters below the roof slope line projection with a minimum clearance as shown in the drawings.
9. Place a protective sleeve of PVC Sch. 40 or steel pipe around the downspout if exposed to machinery traffic or livestock. Sleeve will be a minimum height of 6 feet above grade.

| Roof Gutter and Downspout Schedule |                             |                       |                        |                                   |                   |                     |                                  |                                     |                                      |                                     |                        |
|------------------------------------|-----------------------------|-----------------------|------------------------|-----------------------------------|-------------------|---------------------|----------------------------------|-------------------------------------|--------------------------------------|-------------------------------------|------------------------|
| Roof Number                        | Fascia Board (A)<br>X" x X" | Gutter Size (B)<br>X" | Gutter Length<br>X'-X" | Total Slope<br>ft./100 ft.<br>(C) | Straps<br>Spacing | Downspout<br>Number | Downspout<br>Size (D)<br>X" x X" | Depth of<br>Splash<br>Pad (E)<br>X" | Splash<br>Pad<br>Length (F)<br>X'-X" | Splash<br>Pad Width<br>(G)<br>X'-X" | Clearance<br>(H)<br>X" |
| #1                                 |                             |                       |                        |                                   |                   |                     |                                  |                                     |                                      |                                     |                        |
| #2                                 |                             |                       |                        |                                   |                   |                     |                                  |                                     |                                      |                                     |                        |
| #3                                 |                             |                       |                        |                                   |                   |                     |                                  |                                     |                                      |                                     |                        |
| #4                                 |                             |                       |                        |                                   |                   |                     |                                  |                                     |                                      |                                     |                        |
| #5                                 |                             |                       |                        |                                   |                   |                     |                                  |                                     |                                      |                                     |                        |

I certify the gutter and downspout type, size, gauge, roof gutter slope and mounting method are as shown on the plans and specifications.

NRCS is accepting the construction of this gutter and downspout system on the basis that they have been installed by a licensed builder. Any deficiencies in the construction is the responsibility of the licensed builder whose signature appears on the construction drawings.

MICHIGAN ENGINEERING STANDARD DRAWING

FILE NAME MI-010-B 3-18

STANDARD DWG. NO. MI-010-B

DATE 3-18

SHEET 1 OF 1

Contractor Signature

Date

License Number

Exp. Date

NRCS Representative

Date

Not to Scale

Date

Designed

Drawn

Checked

Approved

K-Style Gutter and Downspout Detail Surface Outlet



File Name

Drawing Name

Sheet of

Co., Michigan  
Township, T. -R., Sec.